WHAT IS CLAIMED IS:

1. Control process for a wireless communications network, said network being composed of stations communicating with mobiles in downlink mode, characterised in that said network includes for a given mobile associated with a server station:

i) computation of a first elementary quantity taking into account the attenuation between the mobile and each nearby station ($L_{v,mu}$) and the limit of the total power emitted by each nearby station ($P_{lim}(v)$), and

ii) the product of the first elementary quantity by a second elementary quantity taking into account the requirements of the mobile vis-a-vis its station (ξ_{mu}') and the attenuation between the mobile and its station ($L_{u,mu}$).

2. Process according to claim 1, characterised in that it additionally includes for a predefined set of mobiles including the mobiles served by said server station:

a) application of steps i) and ii) to each mobile in the set, which gives elementary products,

b) summation of the elementary products obtained at step a), and

c) comparison of a sum resulting from step b) to a load threshold relative to the limit on total power emitted by the server station ($P_{lim}(u)$).

3. Process according to claim 1, characterised in that step i) includes for a given nearby station:

i01) division of the limit on total power emitted by said nearby station ($P_{lim}(v)$) by the attenuation of the mobile vis-a-vis the nearby station ($L_{v,mu}$), and

i02) multiplication of the value obtained at step i01) by the orthogonality factor between the server station and said nearby station (α_{uv}).

4. Process according to claim 3, characterised in that step i) includes :

i0) application of steps i01) and i02) to each nearby station,

i1) summation of the values obtained at step i0),

i2) addition of the external noise (N) to the value obtained at step i1), which gives said first elementary quantity for said given mobile.

5. Process according to claim 2, characterised in that step c) includes computation of the difference between the limit on total power emitted by the server antenna and the common channel power, which gives said load threshold.

6. Process according to claim 2, characterised in that step c) is applied to the value resulting from the summation at step b).

7. Process according to claim 6, characterised in that the mobiles have a fixed data rate demand, and additionally in comprising if the comparison at step c) indicates that the sum is greater than the load threshold:

d) reduction of the number of mobiles in the predefined set of mobiles,

e) iteration of steps a) to c) applied to the reduced set obtained at step d).

8. Process according to claim 2, characterised in that the mobiles have a fixed data rate demand, and in that summation of the elementary products at step b) is performed step by step in a specified order and includes for a given initial value:

b1) addition of an elementary product, associated with a given mobile in the predefined set, to said initial value, which gives a running sum,

b2) iteration of step c) applied to the running sum.

9. Process according to claim 8, characterised in that step b) additionally includes, if the comparison at step b2) indicates that the running sum is below or equal to the load threshold, an iteration of steps b1) and b2) for the next elementary product, in the specified order, with an initial value taken as equal to the running sum obtained at the previous step b1).

10. Process according to claim 9, characterised in that step b) additionally includes, if the comparison at step b2) indicates that the running sum is above the load threshold, an interruption of the summation and denial of access to the server station for the mobile associated with the last elementary product added and for the mobiles associated with the following elementary products, in the specified order.

11. Process according to claim 8, characterised in that summation of the elementary products is performed in ascending order of the elementary products.

12. Process according to claim 8, characterised in that summation of the elementary products is performed in random order of the elementary products.

13. Process according to claim 8, characterised in that summation of the elementary products is performed in an order specified as a function of predefined priorities between the associated mobiles.

14. Process according to claim 8, characterised in that the initial value is null at the first iteration of step b1).

15. Process according to claim 2, characterised in that the mobiles have a fixed data rate demand, and in that it additionally includes access control to the server station for a "candidate" mobile.

16. Process according to claim 15, characterised in that the predefined set of mobiles additionally includes the "candidate" mobile.

17. Process according to claim 15, characterised in that step b) includes storage in memory of the value resulting from the summation.

18. Process according to claim 17, characterised in that the access control additionally includes:

j1) iteration of steps i) and ii) for said candidate mobile, which gives an elementary product associated with the candidate mobile,

j2) addition of this elementary product to the stored sum, and

j3) iteration of step c) applied to the sum obtained at step j2).

19. Process according to claim 16, characterised in that the access control includes authorisation to access the server station for the candidate mobile if the comparison at step c) indicates that the sum is below or equal to the load threshold.

20. Process according to claim 16, characterised in that the access control includes denial of access to the server station by the candidate mobile if the comparison at step c) indicates that the sum is above said load threshold.

21. Process according to claim 1, characterised in that step ii) includes computation of a quantity representing the requirements of the mobile vis-a-vis its server station (ξ_{mu}') from a threshold of the signal-to-interference-and-noise ratio (ξm_u) and the orthogonality factor between the server station channels (α).

22. Process according to claim 21, characterised in that step ii) includes multiplication of the quantity representing the requirements of the mobile vis-a-vis its station ($\xi m_u'$) by the attenuation between the mobile and its server station ($L_{u,mu}$), which gives the second elementary quantity.

23. Process according to claim 21, characterised in that the threshold of the signal-to-interference-and-noise ratio (ξm_u) is computed from the bit rate (D_{bit}) assigned to the mobile.

24. Process according to claim 23 taken in conjunction with claim 6, characterised in that the mobiles have a variable rate demand, and in that step i) initially includes

i'01) computation of the signal-to-interference-and-noise ratio threshold (ξm_u) as a function of an initial bit rate value,

i'02) computation of the quantity ($\xi m_u'$) representing the requirements of the mobile as a function of the signal-to-interference-and-noise ratio threshold (ξm_u) obtained at step i'01),

the process additionally including, if the comparison at step c) indicates that the sum is greater than the load threshold, a modification of the initial bit rate value and an iteration of steps a) to c) for the new initial rate value.

25. Control scheme for a wireless communications network, including stations communicating with mobiles, in downlink mode, said network incorporating an elementary load calculator designed to compute the load induced by a given mobile on a server station, characterised in that the elementary load calculator includes:

- a first function designed to compute a first elementary quantity taking into account the attenuation between the mobile and each nearby station ($L_{v,mu}$) and the limit on the total power emitted by each nearby station ($P_{lim}(v)$),

- a second function designed to compute a second elementary quantity taking into account the requirements of the mobile vis-a-vis its station (ξ_{mu}') and the attenuation between the mobile and its station ($L_{u,mu}$),

- the elementary load calculator being capable of computing the product of the first elementary quantity by the second elementary quantity, which gives an elementary product representing the load induced by the mobile ($EDPAP_{mu}$).

26. Scheme according to claim 25, characterised in that it is capable of computing respective elementary products for a predefined set of mobiles associated with a given server station.

27. Scheme according to claim 26, characterised in that it additionally includes a summation function interacting with the elementary load calculator, the summation function (Σ) being capable of summating the elementary products computed by the elementary load calculator, which gives a load indicator relative to said server station.

28. Scheme according to claim 27, characterised in that it additionally includes a comparator (23) interacting with the summation function, the comparator being capable of comparing the load indicator computed by the summation function for a given server station with a load threshold relative to the limit on total power emitted by the server station ($P_{lim}(u)$).

29. Scheme according to claim 27, characterised in that it includes a threshold calculator designed to compute the difference between the limit on total power emitted by the server station ($P_{lim}(u)$) and the common channel power of the server station ($P'(u)$), which gives said load threshold.

30. Scheme according to claim 25, characterised in that the first function is capable of dividing the limit on total power emitted by a given nearby station ($P_{lim}(v)$) by the attenuation of the mobile vis-a-vis the nearby station ($L_{v,mu}$), and of multiplying the value resulting from the division by the orthogonality factor between the server station and said nearby station (α_{uv}), which gives an intermediate quantity.

31. Scheme according to claim 30, characterised in that the first function is capable of computing the value of the intermediate quantity for each nearby station, summating the values of the intermediate quantities thus obtained, and adding the external noise (N) to the value resulting from the summation, which gives the first elementary quantity for said given mobile.

32. Scheme according to claim 30, characterised in that the first function is capable of computing the value of the intermediate quantity for each nearby station, summating the values of the intermediate quantities thus obtained, and adding the external noise (N) to the value resulting from the summation, which gives the first elementary quantity for said given mobile.

33. Scheme according to claim 27, characterised in that it includes a load reduction function designed to reduce the number of mobiles in the predefined set of mobiles, if the comparator indicates that the load indicator is above the load threshold.

34. Scheme according to claim 27, characterised in that the mobiles have a fixed data rate demand, and in that it additionally includes an access controller to control access of a candidate mobile to a server station as a function of the result returned by the comparator.

35. Scheme according to claim 2 taken in combination with claim 36, characterised in that the predefined set of mobiles also includes the "candidate" mobile.

36. Scheme according to claim 35, characterised in that the access controller is capable of authorising access to the server station for the candidate mobile if the result returned by the comparator indicates that the load indicator is below or equal to the load threshold.

37. Scheme according to claim 35, characterised in that the access controller is capable of denying access to the server station for the candidate mobile if the result returned by the comparator indicates that the load indicator is above the load threshold.

38. Scheme according to claim 25, characterised in that the second function is capable of computing a quantity representing the requirements of the mobile vis-a-vis its server station ($\xi m_u'$) from the threshold of the signal-to-interference-and-noise ratio (ξm_u) and the orthogonality factor between the server station channels (α).

39. Scheme according to claim 38, characterised in that the second function is capable of multiplying the quantity representing the requirements of the mobile vis-a-vis its server station ($\xi m_u'$) by the attenuation between the mobile and its station ($L_{u,mu}$), which gives the second elementary quantity.

40. Scheme according to claim 38, characterised in that the threshold of the signal-to-interference-and-noise ratio (ξm_u) is computed from the bit rate (D_{bit}) assigned to the mobile.

41. Scheme according to claim 40, characterised in that the mobiles have a variable rate demand and in that it includes a load regulator, said regulator being capable of modifying the bit rate value assigned to the mobiles if the result returned by the comparator indicates that the load indicator is below or equal to the load threshold.